

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 2 of the Commission's Rules	)	ET Docket No. 00-258
to Allocate Spectrum Below 3 GHz for Mobile	)	
and Fixed Services to Support the Introduction of	)	
New Advanced Wireless Services, Including Third	)	
Third Generation Wireless Systems	)	
	)	
Amendment of Section 2.106 of the Commission's	)	ET Docket No. 95-18
Rules to Allocate Spectrum at 2 GHz for Use by	)	
the Mobile-Satellite Service	)	
	)	
The Establishment of Policies and Service Rules	)	IB Docket No. 99-81
for the Mobile-Satellite Service in the 2 GHz Band	)	

To: The Commission

**COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION**

Pursuant to the Notice of Proposed Rulemaking in the above-captioned proceeding,<sup>1</sup> the Satellite Industry Association ("SIA") hereby submits these comments.<sup>2</sup>

As discussed below, the Commission must not reallocate any portion of the 1990-2025 MHz and 2165-2200 MHz band ("2 GHz band"), allocated to mobile satellite services

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<sup>1</sup> See *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, FCC No. 01-224, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking (Aug. 20, 2001) ("*Advanced Wireless FNPRM*").

<sup>2</sup> SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers, and launch service companies. SIA serves as an advocate for the U.S. commercial satellite industry on regulatory and policy issues common to its members. With member service companies providing a broad range of manufactured products and services, SIA represents the unified voice of the U.S. commercial satellite industry. SIA's members include: ASTROLINK International LLC; The Boeing Company; GE American Communications, Inc.; Globalstar, L.P.; Hughes Electronics Corp.; Lockheed Martin Corp.;

*Footnote continues...*

(“MSS”), for other services. For many Americans residing in, or traveling through, rural areas, as well as for those that are involved in natural or other disasters, MSS may offer the only effective means of access to communications as well as educational, medical, and other information. The Commission must not hastily overturn years of effort in securing international and domestic 2 GHz MSS allocations for these critical services.

**I. PRESERVING THE 2 GHz MSS ALLOCATION IS NECESSARY TO SATISFY THE PUBLIC’S NEED FOR UBIQUITOUS MSS**

To satisfy the growing demand for basic and advanced wireless services that are available anytime, anywhere, the Commission must preserve the existing 2 GHz MSS allocation and support the growth of next-generation MSS systems. The Commission repeatedly has found that MSS systems offer a cost-effective means of communications to rural and remote areas as well as Native American and other underserved communities.<sup>3</sup> For a substantial number of Americans who still do not receive any telephone service at all, MSS offers not only an opportunity to communicate with others, but also vital access to invaluable educational, medical, political, and financial information.<sup>4</sup> In fact, MSS may be the only practical solution to the problem of connecting communities that are isolated by terrain or distance or otherwise neglected by terrestrial wireline and wireless operators.

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Loral Space & Communications Ltd.; Motient Corp.; PanAmSat Corporation; Teledesic Corporation; and TRW Inc.

<sup>3</sup> See, e.g., *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, 16145 ¶ 32 (2000) (“2 GHz MSS Rules Order”).

<sup>4</sup> See *Extending Wireless Telecommunications Services to Tribal Lands*, Report and Order and Further Notice of Proposed Rule Making, 15 FCC Rcd 11794, 11799 ¶ 13 (2000) (noting that basic telephone service is a necessity, and not just a luxury).

In recognition of the significant public interest in facilitating the growth of low-cost, ubiquitous communications services, the FCC vigorously has pursued international and domestic spectrum allocations for MSS in the 2 GHz band. At the urging of the United States (represented by the FCC, among others), the 1992 World Administrative Radio Conference (“WARC-92”) allocated the 1800-2010 MHz and 2170-2200 MHz bands for MSS worldwide.<sup>5</sup> At the 1995 World Radiocommunication Conference (“WRC-95”), the FCC obtained additional allocations at 1990-2025 MHz and 2165-2200 MHz for MSS in the United States and Canada,<sup>6</sup> and succeeded in facilitating the availability of MSS systems at 1800-2010 MHz and 2170-2200 MHz by January 1, 2000.<sup>7</sup> After WRC-95, the FCC promptly started proceedings to allocate the 2 GHz band to MSS domestically, noting the promise of MSS to extend service to underserved areas that cannot be served feasibly by terrestrial wireless networks.<sup>8</sup> In adopting service rules for MSS only a year ago, the Commission again affirmed its commitment to “encouraging the expeditious delivery of telecommunications services, via satellite services, to unserved communities.”<sup>9</sup>

In addition to extending service to underserved areas, MSS also may offer a critical means of communications during natural and other disasters that render

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<sup>5</sup> *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, 7389 (1997) (“2 GHz MSS Allocation Order”). (citing Final Acts of the 1992 World Administrative Radio Conference, Malaga-Torremolinos (1992)). WARC-92 also allocated the 1930-1980 MHz and 2120-2170 MHz bands to MSS in Region 2 (which includes the United States). *Id.*

<sup>6</sup> See 2 GHz MSS Allocation Order at 7392 ¶ 8 and note 19

<sup>7</sup> *Id.*

<sup>8</sup> *Id.* at 7395, ¶ 13.

<sup>9</sup> 2 GHz MSS Rules Order at 16145, ¶ 33.

alternative terrestrial systems unavailable for use. MSS has proven to be invaluable to the National Guard, the Red Cross, and other rescue and relief organizations during earthquakes, hurricanes, floods, and other disasters. Moreover, several MSS licensees have proposed additional beneficial uses for their proposed satellite systems.<sup>10</sup>

The unique benefits of MSS may be lost, however, if the Commission compromises the viability of 2 GHz MSS systems by failing to maintain the full existing 2 GHz MSS allocation. Furthermore, any radical change in the FCC's domestic 2 GHz MSS allocation could have adverse repercussions in not only rural areas of the United States, but also developing countries around the globe. U.S. leadership in obtaining international MSS allocations has been key in facilitating the delivery of basic telecommunications services to regions of the world where none previously existed. The Commission must not falter in its long-standing commitment to ensure that all areas of the United States and the world have access to basic and advanced telecommunications services.

## **II. THE FCC SHOULD SUPPORT THE DEVELOPMENT OF 2 GHz MSS SYSTEMS**

The FCC should continue to support the development of 2 GHz MSS systems, much in the same way as it has for other nascent services such as direct broadcast satellite ("DBS"), cellular, FM, and UHF.<sup>11</sup> The FCC allowed these new entrants enough time to develop their services and allow the marketplace to decide how the services would be

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<sup>10</sup> For example, Boeing is planning to use 2 GHz MSS spectrum to provide aeronautical mobile satellite (route) services ("AMS(R)S") to serve the global aviation industry.

<sup>11</sup> See Ex parte letter from The Boeing Company, CCI International NV, Mobile Communications Holdings, Inc., New ICO Global Communications (Holdings) Ltd., and TMI, to M.R. Salas, Secretary, FCC, Attachment 1 (June 29, 2001).

received. As a result of the FCC's understanding of the individual deployment times and needs, each of these services has developed as a commercially viable business attracting an ever growing subscriber or audience base.

In allocating the 2 GHz band for MSS, the Commission faced the very difficult challenge of relocating various terrestrial users operating in the band. Recognizing that the total cost of moving all of those different users concurrently with the introduction of MSS would be extremely costly, the Commission crafted a complex but workable phased relocation plan designed to distribute the relocation costs over time and try to protect the interests of all the users, new and old. The relocation approach adopted by the Commission includes the phased introduction of MSS systems (starting with small spectrum assignments that may expand as use increases) and the phased relocation of the incumbent terrestrial users. It is simply impossible to add more degrees of complexity to this approach by trying to add more services in the band. After the many years it has taken the Commission to resolve the 2 GHz MSS matters and finally license the systems, additional delay, confusion and possible increased cost of a more complicated spectrum plan at 2 GHz would be unconscionable and could fatally wound the prospects for many of the MSS licensees.

2 GHz MSS licensees already have expended billions of dollars in reliance on the FCC's efforts to secure 2 GHz MSS spectrum and license new MSS participants. ICO Services Ltd., for example, has invested more than \$3 billion to develop a fleet of satellites, obtain pre-paid launch vehicles, and build major gateway sites.<sup>12</sup> It would

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<sup>12</sup> See Ex parte letter from C. Tritt, Counsel for ICO Global Communications, to FCC Chairman and Commissioners at 2 n.2 (Apr. 19, 2000).

disserve the public interest to deprive these licensees of sufficient spectrum before giving them an opportunity to grow their business. As important, reducing the MSS allocation will add further uncertainty to the FCC's spectrum allocation process and deter others from investing in the deployment of innovative services.

### **III. FCC ADHERENCE TO INTERNATIONAL ALLOCATIONS IS CRUCIAL TO THE SUCCESS OF GLOBAL MSS SYSTEMS AND U.S. CREDIBILITY ABROAD**

In recognizing the importance of global contiguous spectrum, the FCC has stated that “wireless and, *especially, satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum.*”<sup>13</sup> The FCC thus declared that the domestic 2 GHz MSS allocation “should be as consistent as possible with the WARC-92 and WRC-95 allocations.”<sup>14</sup> As a result of the FCC's efforts, WRC-95 maintained the allocation of the 1980-2010 MHz and 2170-2200 MHz bands to MSS worldwide and allocated the 1990-2025 MHz and 2165-2200 MHz bands for MSS in the United States and Canada. A reallocation of the 2 GHz MSS spectrum for other uses would conflict with these international allocations. Furthermore, because of the active role of the United States in obtaining international MSS allocations at both WARC-92 and WRC-95, a material modification of the FCC's domestic 2 GHz MSS allocation could be viewed by the international community as a lack of good faith and compromise U.S. ability to secure both satellite and terrestrial global allocations in the future.

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<sup>13</sup> *Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands*, Further Notice of Proposed Rule Making, FCC Rcd 12244, 12248 ¶ 8 (2001) (emphasis added).

<sup>14</sup> *2 GHz MSS Allocation Order* at 7395 ¶ 14.

#### **IV. REALLOCATION OF 2 GHZ MSS SPECTRUM FOR TERRESTRIAL USES WOULD NOT SPEED UP SERVICE DELIVERY NOR LEAD TO MORE EFFICIENT SPECTRUM USE**

The Commission has already granted eight licenses for 2 GHz MSS systems, and has set a time frame for these licensees to construct, launch and establish operations. Reallocating some 2 GHz MSS spectrum will not expedite service to the public because the FCC would have to adopt service and licensing rules for terrestrial systems. The impact on 2 GHz licensees is unclear, but changes in the size or segmentation of the 2 GHz MSS spectrum could affect implementation of the satellite systems. Under the current allocation and plans for implementation, some 2 GHz MSS licensees may very well initiate service before any terrestrial 3G entrant could begin providing service.

In addition, reallocating 2 GHz MSS spectrum for terrestrial services such as 3G may lead to inefficient spectrum use, in light of reports that consumer demand may not warrant the exaggerated requests for 3G spectrum.<sup>15</sup> A recent study by Merrill Lynch found that “[n]ext-generation phones have yet to stimulate demand, in part due to limited handset availability today and also to lack of interesting applications to draw user interest longer term.”<sup>16</sup> The Department of Defense has also stated that “there is reasonable doubt about whether this assessment [of the need for 160 MHz of 3G spectrum] is valid for the United States and uncertainty about the timeline for meeting any additional

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<sup>15</sup> See, e.g., *Only Three Companies Apply for Belgium’s “3G” Licenses*, Telecommunications Report (Feb. 12, 2001) (reporting “scant interest” in 3G licenses in Belgium); *Singapore Government Reduces Bid Fees for April “3G” Auction*, Telecommunications Report (Mar. 12, 2001) (Singapore government officials acknowledge “weak market” for 3G services); *Disappointing Wireless Auction*, The New York Times (Mar. 24, 2001) (revenues from Australia’s auction of 3G licenses fall below government’s expectations); *Spectrum Shortage*, Red Herring Magazine (Sept. 1, 2000) (“demand for wireless Internet service in the United States hasn’t reached the same levels it has in Europe or Asia, where mobile penetration is greater”), at [www.redherring.com](http://www.redherring.com).

needs.”<sup>17</sup> Given the apparent lack of demand for terrestrial 3G service, at least in the near future, the FCC should not take any drastic measure that likely could lead to less efficient use of the spectrum. Reallocation of the spectrum would disserve the public interest by damaging the nascent MSS industry while providing marginal benefits for terrestrial 3G services for which there is little or no demonstrated immediate need.

## **V. CONCLUSION**

For the reasons set forth above, the Commission should preserve its existing 2 GHz MSS allocation and allow 2 GHz MSS licensees an opportunity to make full use of the MSS allocation.

Respectfully submitted,

**Satellite Industry Association**

**Richard DalBello**

Executive Director

October 22, 2001

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<sup>16</sup> *Merrill Lynch Predicts First-Ever Decline in Mobile Phone Handset Sales in 2001*, TR Daily (Sept. 5, 2001).

<sup>17</sup> Testimony of Dr. Linton Wells II, Acting Assistant Secretary of Defense, before the Communications Subcommittee of the Senate Committee on Commerce, Science and Transportation Committee (July 31, 2001).